



(1 of 2)

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 3

Complete if Known

Application Number	10/091,750
Filing Date	March 5, 2002
First Named Inventor	Louis B. Rosenberg
Art Unit	2674
Examiner Name	Kevin M. Nguyen
Attorney Docket Number	IMMR-014/02US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
KMN		6,717,573	4/06/2004	Shaholian et al.	
		6,422,941	7/23/2002	Thomer et al.	
		6,160,489	12/12/2000	Perry et al.	
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		5,690,582	11/25/1997	Ulrich et al.	
		5,575,761	11/19/1996	Hajianpour	
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		5,175,459	12/29/1992	Danial et al.	
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		4,127,752	11/28/1978	Lowthorp	
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		20020024501	03/04/1999	Shalit	
		2001/0010513	08/02/2001	Rosenberg et al.	

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
KMN		JP	H2-185278		7/19/1990	Taito Corporation	
		JP	H4-8381		1/13/1992	Epoch Co. and Key- Planning Co.	
		JP	H7-24147		1/27/1995	Sega Corporation	
		JP	H5-192449		8/3/1993	Taito Corporation	

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Examiner Signature	Kevin M. Nguyen	Date Considered	7/11/05
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¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Attorney Docket Number	IMMR-014/02US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
KMN		PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis</i> , MIT, Aug. 1990, archived Nov. 8, 1990.
1		CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," <i>Bachelor of Science Thesis</i> , MIT, May 1983, archived June 23, 1983.
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		BLISS, "Optical-to-Tactile Image Conversion for the Blind," <i>IEEE Transactions on Man-Machine Systems</i> , Vol. MMS-11, No. 1, March 1970.
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		"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
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		KACZMAREK et al., "Tactile Displays," <i>Virtual Environment Technologies</i> , Chap. 9, pp. 349-414.
		LAKE, "Cyberman from Logitech," at http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html , 1994.
✓		"Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).

Examiner Signature Kevin M. Nguyen

Date Considered

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Substitute for form 14-1005-10		Complete if Known			
		Application Number	10/091,750		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	March 5, 2002		
		First Named Inventor	Louis B. Rosenberg		
		Art Unit	2674		
		Examiner Name	Kevin M. Nguyen		
Sheet	3	of	3	Attorney Docket Number	IMMR-014/02US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
KMN		"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).	
↓		SCANNELL, "Taking a Joystick Ride," <i>Computer Currents</i> , Boston Edition, Vol. 9, No. 11, November 1994	
↓		YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," <i>Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems</i> , Raleigh, NC, July 7-10, 1992	
↓		NOLL, "Man-Machine Tactile," <i>SID Journal</i> , July/August 1972 Issue.	
↓		ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance In Telepresence Tasks," <i>Ph.D. Dissertation</i> , Stanford University, June 1994.	

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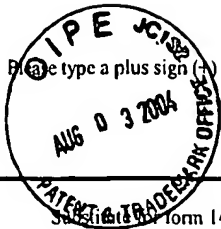
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Examiner Signature	Kevin M. Nguyen	Date Considered	7/11/05
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(2 of 2)

PTO/SB/08A (08-00)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		<i>Complete if Known</i>	
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		Filing Date	March 5, 2002
		First Named Inventor	Louis B. ROSENBERG
		Group Art Unit	2674
		Examiner Name	Kevin M. Nguyen
Sheet 1 of 5	Attorney Docket Number	IMMR-014/02US	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
KMN		5,877,750		Hanson	03/1999
↓		3,875,488		Crocker et al.	4/1975
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	5,184,319		Kramer	2/1993	
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↓		5,186,629		Rohen	2/1993

¹ Unique citation designation number.

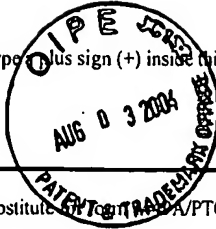
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PTO/SB/08A (08-00)

Substitute for PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	10/091,750
		Filing Date	March 5, 2002
		First Named Inventor	Louis B. ROSENBERG
		Group Art Unit	2674
		Examiner Name	Kevin M. Nguyen
		Attorney Docket Number	IMMR-014/02US
Sheet	2	of	5

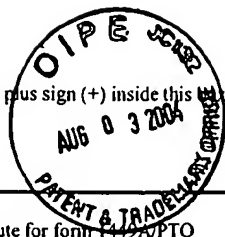
KMN	5,189,355	Larkins et al.	2/1993
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	5,721,566	Rosenberg et al.	2/1998
✓	5,724,278	Chen et al.	3/1998

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KMN		5,734,373	Rosenberg et al.	3/1998
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		5,745,715	Pickover et al.	4/1998
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✓		5,990,869	Kubica et al.	11/1999

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Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ¹	Number ²	Kind Code ³ (if known)		
KMN		EP.	0085518	A1	RECEIVED	1/1983
		EP.	0626634	A2		11/1994
		EP	875819		AUG 3 1 2004	4/1998
		WO	95/20788			8/1995
		WO	95/32459		Technology Center 2600	11/1995
		WO.	97/21160			6/1997
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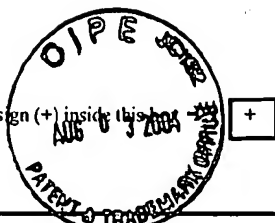
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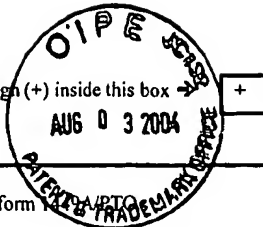
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KMN		Ramstein et al., "The Pantograph: A Large Workspace Haptic Device for a Multimodal Human-Computer Interaction," Computer-Human Interaction, CHI 1994, pp. 1-3.	
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		Application Number	10/091,750
		Filing Date	March 5, 2002
		First Named Inventor	Louis B. ROSENBERG
		Group Art Unit	2674
		Examiner Name	Kevin M. Nguyen
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		Attorney Docket Number	IMMR-014/02US

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Examiner Signature	Kevin M. Nguyen	Date Considered	7/11/2005
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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